



Project Scope Summary Report

Perez Pavement

02-MOD-139

PM 10.7/28.0

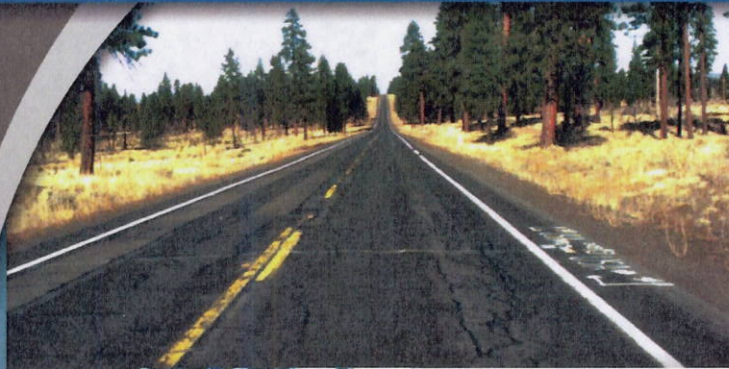
PPNO 3466

20.XX.201.120

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02-4E440_

September 2011



MOD 139
PM 20.95
Northbound



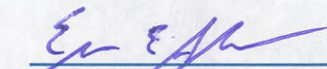
MOD 139
PM 13.3
Southbound

PROJECT LOCATION


In Modoc Co about
17 miles south of
Newell from 0.1 mile
north of Boles Rd to
0.1 mile south of
Perez Rd



Approval Recommended:

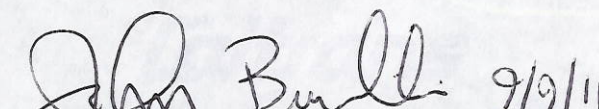

ERIC AKANA, P.E.
Project Manager, District 2

9/9/11
Date

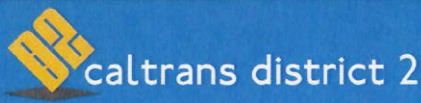

ED LAMKIN, P.E.
Deputy District Director
Maintenance and Operations, District 2
SHOPP Program Manager

9/9/11
Date

Approved By:


JOHN BULINSKI, P.E.
District Director, District 2

9/9/11
Date



Perez Pavement Project Location

02-MOD-139 PM 10.7/28.0





Caltrans

This Project Scope Summary Report has been prepared by the following Registered Civil Engineer. The Registered Civil Engineer attests to the best of his knowledge the technical information contained therein and has judged the qualifications of any technical specialists providing engineering data upon which recommendations, conclusions and decisions are based.



Oscar Cervantes

Oscar Cervantes, P.E.
Registered Civil Engineer

9-9-11
Date

PROJECT SCOPE SUMMARY REPORT (ROADWAY REHABILITATION)

1. INTRODUCTION

This Project Scope Summary Report proposes to rehabilitate the pavement with a 20-year design life through use of the Resurfacing and Restoration Program for the segment from PM 10.7 to 28.0 on State Route (SR) 139 in Modoc County.

Capital Costs:	<u>Current</u>	<u>Escalated</u>
	\$11 million	\$13 million
Structures:	\$0	
Roadway:	\$11 million	

Right of Way Costs: \$30,000

Funding Source: 2012 SHOPP

Number of Alternatives: 3 plus no build

Preferred Alternative for Programming Purposes: Alternative A

Type of Facility: Two lane conventional highway

Project Program: 20.XX.201.120

Anticipated Environmental Determination Document: CEQA – Categorical Exemption;
NEPA – Categorical Exclusion

Construction Year: 2015/2016

Working Days: 65

PM Limits: 10.7/28.0

Legal Description: In Modoc County about 17 miles south of Newell, from 0.1 mile north of Boles Road to 0.1 mile south of Perez Road.

Northbound view at PM 20.95.



Note sealed and transverse cracking. Propose to rehabilitate pavement by pulverizing from edge of pavement (EP) to EP and then placing hot mix asphalt (HMA) overlay surface.

Southbound at PM 13.3



Note sealed longitudinal cracking and alligator cracking. Propose to rehabilitate pavement by pulverizing from EP to EP and then placing HMA overlay surface.

Performance Measures:

1. 35.4 Lane Miles of Pavement Rehabilitation
2. 18.0 Retired Distressed Lane Miles
3. 1 new Closed Circuit Television Camera (CCTV)
4. 1 Roadside Weather Information System (RWIS)
5. Sign Rehabilitation – 87 signs upgraded to current standards
6. Drainage System Restoration – Extend 7 culverts, rehabilitate 8 culverts by lining the culverts, install flared end sections on 2 culverts

2. RECOMMENDATION

It is recommended that this project be programmed based on Alternative A.

3. PURPOSE AND NEED STATEMENT

Purpose – Improve the ride quality, reduce maintenance cost and improve safety.

Need- The existing highway provides poor ride quality and is expensive to maintain.

4. EXISTING FACILITY, DEFICIENCIES AND TRAFFIC DATA

4A. ROADWAY GEOMETRIC INFORMATION

	Facility (1)	Minimum	Through Traffic Lanes (2)			Paved Shoulder Width (3)		Median (4)	Shoulder is a Bicycle Lane (Y/N) (5)	Other Bike Lane Width (6)	Bike route (7)
	Location	Curve Radius	No. of Lanes	Lane Width	Type	Lt	Rt	Width	Width	Width	(Y/N)
MOD-139											
Existing	10.7/28.0	2000'	2	12'	Flex	4'	4'	NA	Y	NA	N
Proposed	10.7/28.0	2000'	2	12'	Flex	4'	4'	NA	Y	NA	N
	Min. 3R Stds.	1625'		12'		4'	4'				

Remarks: Note there is a third lane south bound starting at the Agriculture Station at PM 23.2 to PM 22.37 for a total length of 0.82 miles.

This is a rural highway going through USFS land and there is no pedestrian expectation for this section of highway that is being rehabilitated.

4B. PAVEMENT CONDITION OF EXISTING FACILITY

(1) Traveled Way Data

Please see Attachment G for traveled way data from the 2008 Pavement Condition Inventory Survey Data. Existing traveled way has no surface water problems. There is no deflection study result available at this time for this project.

(2) Shoulder Data

The existing shoulders have high alligator cracking (Types ABC)

(3) Pedestrian Facility Data

There are no pedestrian facilities within the project limits.

(4) Bicycle Path Data

There is no designated bicycle path within the project limits. Bicycles are allowed on all sections of SR 139.

4C. STRUCTURES INFORMATION

No structures

4D. VEHICLE TRAFFIC DATA

Present Year ADT (2011) MOD 139 PM 10.7/28.0 is 1,250

Construction Year ADT	1,418	10-Year ADT	1,698
10-YEAR DHV	136	20-Year ADT	1,978
20-YEAR DHV	158	% Trucks	25
T.I. (10-Year)	9.5	ESAL (10-Year)	1,422,700

T.I. (20-Year) 10.5 ESAL (20-Year) 3,006,700

Latest 5-Year Accident Data: 01/01/05 to 12/31/09
(average vs. actual rates)

Location(s) of Accident Concentration: No concentrations found

(*Acc/MVM=accidents per million vehicle miles-average vs. actual rates)

Accident Rates for MOD-139 PM 10.7/28.0

*Acc/MVM	Fatal	Fatal + injury	Total
Actual	0.056	0.36	0.87
Average	0.034	0.48	1.07

Corrective Strategy:

There were 31 accidents that occurred during the recorded time period. The most common accident was run off the road overturn crashes (12) followed by run off the road hit object crashes. The most common run off the road crashes was hit a tree (6, of which two resulted in fatalities). 12 of the accidents happened in snowy/icy road conditions. This project will improve Clear Recovery Zone (CRZ) by removing trees within the CRZ and also allow more sun light on the roadway to reduce icy conditions.

Safety Analysis Summary:

District 2 Traffic Operations submitted a Safety Analysis for the pavement rehabilitation project. The following safety improvements are incorporated:

- Replace census loops at PM 17.1 and 17.8.
- All fixed objects should be located outside the CRZ. Trees should be removed where feasible and non-breakaway signs should be relocated outside the CRZ.
- Replace Guide Signs where needed.
- Shoulder backing should be placed to eliminate drop-offs along the edge of pavement.
- Recessed reflective pavement markers should be placed throughout the project limits.
- Existing striping should be replaced with extruded thermoplastic.

4E. MATERIALS

The Materials Branch issued the following three structural section recommendations for this project:

- Pulverization (full depth reclamation) with cement. This is the preferred alternative.
- Pulverization (full depth reclamation) with cold foam asphalt and cement.
- Pulverization (full depth reclamation) without cement.

5. CORRIDOR AND SYSTEM COORDINATION

This roadway rehabilitation project is on State Route (SR) 139 in Modoc County between PMs 10.7-28.0. This portion of SR 139 is part of the National Highway System (NHS), and the Interregional Road System between SR 299 and the Oregon State Line. SR 139 serves as a principal arterial at this location. The current facility is two-lane conventional, with 12 ft lane widths, and 4 ft treated shoulders.

This project will make improvements for CRZ, drainage, adding CCTV and RWIS facilities. These types of improvements are consistent with the 1990 SR 139 Route Concept Report and the 2005 Modoc County Regional Transportation Plan.

6. ALTERNATIVES

6A. REHABILITATION STRATEGY:

Alternative A

It is proposed to rehabilitate the pavement using full depth reclamation from Edge of Pavement (EP) to EP between post miles (PM) 10.7 and 28.0 using a 20 year design life. This consists of combining pulverized asphalt concrete (AC) and base material for a total depth of 0.80' and treating the material with and 2% cement material. Then place 0.30' hot mix asphalt (HMA) on the pulverized base material (PAB). Existing road approaches will be cold plane and paved.

Other improvements are:

- Repair corrugated steel pipe (CSP) culverts by using cured-in-place pipeliner (CIPP) at PM 10.99, 11.10, 12.16, 13.97, 14.08, 14.7, 15.35 and PM 16.06. Install flared end sections (FES) on culverts at PM 17.34 and 17.40. Extend culverts at PM 13.23, 13.38, 13.67, 13.97, 14.08, 14.43, and 14.70 outside the CRZ where feasible.
- Install Closed Circuit Television Camera (CCTV) and Road Weather Information Systems (RWIS) at PM 22.95 which will require power and phone at this location.
- Replace traffic census loops at PM 17.1 and 17.8.
- Trees within the clear recovery zone (CRZ) are to be removed where possible. It is estimated 100 trees can be removed. Note existing side slopes are flat, majority of project is 4:1 or flatter.
- Replace signs within the project limits.
- Replace sand filled crash cushions at the Agriculture Station PM 23.2.

6B. DESIGN EXCEPTIONS:

There are no design exceptions for this project.

6C. ENVIRONMENTAL COMPLIANCE:

The anticipated environmental compliance document is a Categorical Exemption to comply with the California Environmental Quality Act (CEQA) and a Categorical Exclusion to comply with the National Environmental Policy Act (NEPA). A minimum of 24 months of lead time for environmental studies is anticipated prior to Project Approval and Environmental Document (PAED).

The project limits has a high occurrence of cultural resources. It is anticipated that it will be necessary to consider avoidance measures such as establishment of environmentally sensitive areas (ESAs) and approval to deviate from the standard CRZ at some locations.

To comply with Migratory Bird Treaty Act shrubs and trees will need to be removed after August 1 and prior to March 1. Nesting raptors and occurrence of special status plants have been documented in the project area. If present, consultation and coordination with respective resource agencies would be required. Construction work windows and/or buffer (no-work) zones, which vary by species, could be required to avoid an impact.

Repairing and extending culverts could affect jurisdictional wetlands or streams. If affected, the following permits would be required: 1602 Streambed Alteration Agreement from the California Department of Fish and Game, Water Quality Certification from the Regional Water Quality Control Board and a Nationwide Permit from the U.S. Army Corp of Engineers.

6D. HAZARDOUS WASTE DISPOSAL SITE:

It is expected that lead will be present in soils within the project, however it is anticipated it will not occur at Hazardous Waste levels.

Treated Wood Waste (TWW) is present within the project limits in the form of sign posts and must be disposed of at an appropriately permitted disposal facility.

A geologic evaluation regarding Naturally Occurring Asbestos (NOA) within the project limits does not indicate the potential for the presence of altered ultramafic bedrock, alluvium derived from ultramafic rock, and other rock commonly associated with NOA.

The proposed project is not within or impacting any site on the Cortese list.

6E. OTHER AGENCIES INVOLVED:

1602 Streambed Alteration Agreement from the California Department of Fish and Game, Water Quality Certification from the Regional Water Quality control Board and a Nationwide Permit from the U.S. Army Corp of Engineers may be required.

State Route 139 is a U.S. Forest Service (National) Scenic Byway. Concurrence will be required from Modoc National Forest that the proposed project will not adversely affect attributes of the highway which contribute to the Scenic Byway status.

6F. MATERIALS AND OR DIPOSAL SITES NEEDS AND AVAILABILITY:

Cold plane material could be mixed with imported material and used for shoulder backing. If not used for shoulder backing, our Maintenance Personnel would like it to be stored at the Tionesta Storage Stockpile located at PM 26.5.

6G. STORMWATER COMPLIANCE:

The Storm Water Data Sheet will be deferred until after the Project Initiation Document (PID) is approved. It is anticipated that standard measures will meet the needs of the project.

6H. RIGHT OF WAY ISSUES:

Coordination is required with the US Forest Service for the removal of trees within the CRZ. Approximately 100 trees are expected to be removed. Any timber removed will need to be paid prior to removal. The value of the timber is estimated to be \$25,000.

6J. RECYCLED MATERIALS:

The existing AC will be recycled in place (full depth reclamation). AC grindings are anticipated to be used for shoulder backing.

6O. ALTERNATIVES STUDIED, REASONS NOT RECOMMENDED:

Two alternatives exist plus no build were considered and described below:

- Alternative B - rehabilitate the structural section by pulverization and adding cold foam and cement plus all the improvements in Alternative A. At this point, Alternative A appears to provide better value. (Construction cost of \$13 million)
- Alternative C - rehabilitate the structural section by pulverization and not adding cement or cold foam plus all the improvements in Alternative A. At this point, Alternative A appears to provide better value. (Construction cost of \$9 million)
- The no build alternative-This was considered and rejected because existing poor pavement conditions will continue to deteriorate due to no rehabilitation work.

7. TRANSPORTATION MANAGEMENT

7A. TRANSPORTATION MANAGEMENT PLAN

Preliminary traffic impacts and mitigation for this project have been outlined in the attached TMP. Based on the current workplan status, there are no other projects on the SR 139 corridor scheduled for construction in the 15/16 Fiscal Year. Costs associated with the traffic impact mitigation measures listed in the TMP have been included in this document's estimate.

7B. VEHICLE DETECTION SYSTEMS

There are two traffic census loops at PM 17.1 and PM 17.8. They will be replaced. New CCTV and RWIS are proposed at PM 22.95. They will require power.

8. ENVIRONMENTAL DETERMINATION/DOCUMENT

It is anticipated the project will be determined to be a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA.

9. FUNDING/SCHEDULING

9A. COST ESTIMATE (FOR ALTERNATIVE A)

<u>Pavement Work</u>	<u>Lane-Miles</u>	<u>Number</u>	<u>Cost</u>
Flex Overlay of Flex Pavement (FDR with cement)	<u>35.4</u>		<u>\$8,243,700</u>
Hot Recycled AC	<u>NO</u>		<u> </u>
Cold Recycled AC	<u>NO</u>		<u> </u>
Reconstruct Lane(s)	<u>NO</u>		<u> </u>
Total Lane-Miles of Rehabilitation	<u>35.4</u>		

<u>STRAIN Work</u>	<u>NONE</u>	
COSTS SUBTOTAL		<u>\$8,243,700</u>

<u>Does the Project Include?</u>	<u>Yes/No</u>	<u>Cost</u>
Main Line Widening (lanes and/or shoulders)	<u>NO</u>	<u> </u>
Drainage Rehabilitation (culvert linings, culvert extensions)	<u>YES</u>	<u>\$160,700</u>
<u>Safety</u>	<u>Yes/No</u>	<u>Cost</u>
Rumble Strip	<u>NO</u>	<u> </u>
Superelevation Correction	<u>NO</u>	<u> </u>
Vertical Alignment	<u>NO</u>	<u> </u>
Horizontal Alignment	<u>NO</u>	<u> </u>
Left/Right-Turn Storage/Widening/Lengthening	<u>NO</u>	<u> </u>
Crash Cushions	<u>YES</u>	<u>\$10,000</u>

<u>Roadside Management</u>	<u>Yes/No</u>	<u>Cost</u>
Miscellaneous Paving	<u>NO</u>	<u> </u>
Maintenance Vehicle Pull outs	<u>NO</u>	<u> </u>
Roadside Facilities (ITS elements)	<u>YES</u>	<u>\$340,000</u>

<u>Traffic Control</u>	<u>YES</u>	<u>\$129,600</u>
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<u>Other</u>		
Supplemental Work	<u>Yes</u>	<u>\$468,000</u>

State Furnished

Yes \$12,000

SUM OF SUBTOTALS \$9,364,000

15% Contingency (of Subtotals) \$1,405,000

TOTAL CAPITAL COST (ROUNDED) \$11,000,000

Utility Relocation NO

Railroad Agreements NO

Right of Way YES \$25,000

Environmental Compliance YES \$5,000

TOTAL PROJECT COST \$11,000,000

9B. PROJECT SUPPORT

The following table outlines the estimated hourly effort and other support costs. These hours and support costs are based on the programming schedule shown below. Costs are shown in \$1000s. It is proposed to program this project in the 2012 SHOPP in the 15/16 Fiscal Year.

NOTE		CAPITAL & SUPPORT COSTS BY PROGRAM AND PROJECT FUNDING COMPONENT (Perez Rehabilitation)						
Please provide input to all yellow cells								
Program	Component	"Baseline" (Original Identified Hours and Funding)						
EA 4E440 EFIS 0200020285		Planned (Hours)	Loaded Rate Estimate (\$/Hr.)	Program Funding by Component (x1000)			Total Component Funding	Support/ Capital (%)
				Prior Allocation	Initial Allocation Expectation			
					Direct Charges	Indirect Charges (ICRP)		
201.120	PA&ED	6,350	\$96.00	\$0	\$411	\$198	\$610	4.26%
201.120	PS&E	11,943	\$98.00	\$0	\$790	\$381	\$1,180	8.23%
201.120	R/W	2,600	\$71.00	\$0	\$125	\$60	\$190	1.33%
201.120	CON	19,528	\$96.00	\$0	\$1,265	\$610	\$1,880	13.11%
SUPPORT SUBTOTAL		40,421		\$0	\$2,591	\$1,249	\$3,840	26.79%

		Baseline	Escalation	Total	PPM Deputy Directors Initials <u>Sc</u> <u>9/9/11</u>
201.120	R/W Capital	\$30	\$5.3	\$35	
201.120	Construction	\$10,980	\$1,345.1	\$12,400	
201.120	Contingencies (15%)	\$1,647	\$202	\$1,900	
CAPITAL SUBTOTAL		\$12,657	\$1,552	\$14,335	
TOTALS				\$18,175	

Rate Information		Input	RANGE	Historic Program Support/Capital Cost Data (%)	
Capital Contingency Rate %		15.00%		Lowest Similar Project	19%
ICRP Rate %		32.52%		Highest Similar Project	35%
Escalation Rate Construction		3.50%		Average Similar Project	26%
Escalation Rate R/W		5.00%		Cumulative 2010 SHOPP Support/Capital	
# of years to escalate		4		24%	

Escalation is not included in support cost estimate.

9C. PROJECT SCHEDULE

The following table shows a programming schedule. All commitments for time of delivery should assume that no work would commence until after the projects are programmed.

PROJECT SCHEDULE					
MS #	MILESTONE	DATE	MS #	MILESTONE	DATE
M020	BEG ENV DOC	10/4/2012	M460	RTL	10/7/2015
M200	PA&ED	7/17/2014	M500	APP CONTRACT	3/17/2016
M377	PS&E to DOE for QA	2/26/2015	M600	CCA	7/17/2017
M380	PROJECT PS&E	5/13/2015	M700	FINAL REPORT	1/15/2019
M410	R/W CERT	9/16/2015	M800	FINAL CLOSEOUT	1/15/2019

10. FEDERAL COORDINATION

This project is determined to fall within the delegated authority for State-Authorized under the current Federal Highway Administration /Caltrans Stewardship Agreements.

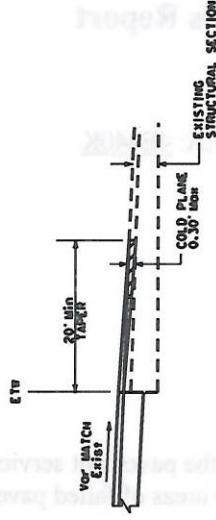
11. PROJECT REVIEWED BY:

Field Review	_____	Date	5/26/11
District Maintenance	Lance Brown	Date	5/26/11
District Safety	_____	Date	_____
District Materials	_____	Date	_____
HQ Design Coordinator/Reviewer	_____	Date	_____
HQ Pavement Program Advisor	Brian Weber	Date	5/26/11
FHWA	_____	Date	_____
Others	Mark Miller-Advance Planning Chief	Date	5/26/11

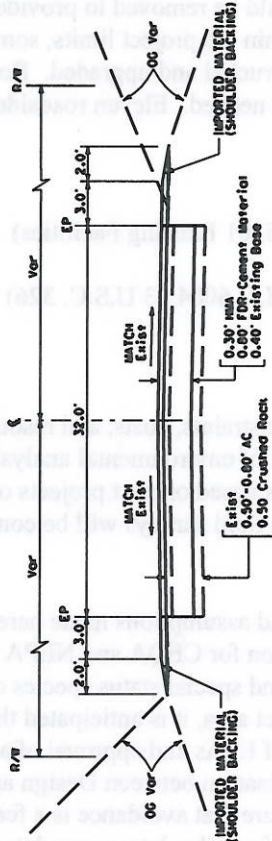
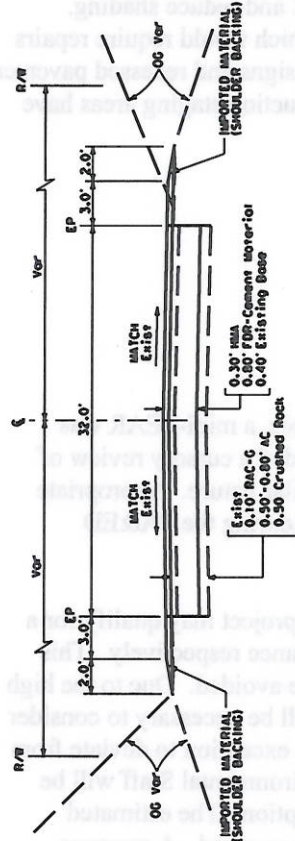
12. LIST OF ATTACHMENTS

- A. Vicinity Map (Cover Sheet)
- B. Typical Cross Sections
- C. Environmental Determination Form
- D. Right of Way Certification
- E. Preliminary Project Cost Estimate
- F. Traffic Management Plan
- G. 2008 Pavement Condition Inventory Survey Data
- H. Risk Log

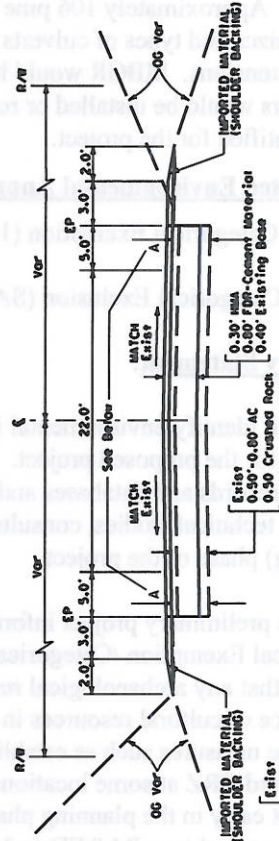
ABBREVIATION
FDR-TA FULL DEPTH RECONSTRUCTION



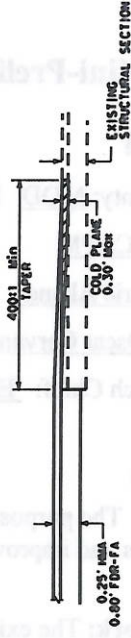
CONFORM TAPER FOR PAVED ROAD CONNECTIONS



TYPICAL CROSS SECTION PM 17.7/20.9



TYPICAL CROSS SECTION PM 20.9/20.0



MAINLINE CONFORM TAPER

TYPICAL CROSS SECTIONS NO SCALE X-1

Mini-Preliminary Environmental Analysis Report

Project Information

District: 02 County: MOD Route: 139 Post Mile: 10.7/28.0 EA: 4E440K

Project Title: Perez CAPM

Project Manager: Eric Akana Phone # (530) 225-3530

Project Engineer: Oscar Cervantes Phone # (530) 225-3236

Environmental Branch Chief: Ed Espinoza Phone # (530) 225-3308

Project Description

Purpose and Need: The purpose of the project is to preserve and extend the pavement service life for a minimum of 20 years and improve ride quality. The existing roadway has areas of failed pavement and rough ride quality.

Description and Work: The existing structural section would be rehabilitated utilizing a full-depth reclamation process. Sight distance and clear recovery zone (CRZ) improvements would require tree removal, culvert extensions, and minor cuts and fills. Pavement shading in the winter is also an issue in this area. Approximately 106 pine trees would be removed to provide a CRZ and reduce shading. Various sizes and types of culverts exist within the project limits, some of which would require repairs and/or extensions. MBGR would be reconstructed and upgraded. Roadway signs and recessed pavement delineators would be installed or replaced as needed. Eleven roadside construction staging areas have been identified for the project.

Anticipated Environmental Approval:

CEQA: Categorical Exemption (14 CCR 15301 Existing Facilities)

NEPA: Categorical Exclusion (SAFETEA-LU 6004 23 U.S.C. 326)

Summary Statement:

In order to identify environmental issues, constraints, costs, and resource needs, a mini-PEAR was prepared for the proposed project. The level of environmental analysis included a cursory review of resource records and databases and estimates based on past projects of a similar nature. Appropriate research, technical studies, consultation, and field surveys will be conducted during the PA&ED (planning) phase of the project.

Based on preliminary project information and assumptions made herein, the project may qualify for a Categorical Exemption /Categorical Exclusion for CEQA and NEPA compliance respectively. This assumes that any archaeological resources and special status species could be avoided. Due to the high occurrence of cultural resources in the project area, it is anticipated that it will be necessary to consider avoidance measures such as establishment of ESAs and approval of a design exception to deviate from the standard CRZ at some locations. Coordination between Design and Environmental Staff will be important early in the planning phase to ensure that avoidance is a feasible option. The estimated timeframe to achieve PA&ED is *24 months* from the date a complete ESR is received. A resource estimate for this scenario is included in Attachment A.

If a cultural resource could not be avoided, it may be necessary to evaluate the resource for eligibility for listing in the National Register of Historic Places (NRHP). This would increase the timeframe and resource needs for cultural staff, including the need to utilize a consultant. If an eligible resource were adversely affected, additional time and resources would be necessary to prepare additional reports, generate a mitigation proposal and perform mitigation, and prepare a higher level environmental document.

To comply with the Migratory Bird Treaty Act, trees and shrubs will need to be removed after August 1 and prior to March 1. Nesting raptors and occurrences of special status plant and animal species have been documented in the project area. If present, consultation and coordination with the respective resource agencies would be required. Construction work windows and/or buffer (no-work) zones, which vary by species, could be required to avoid an impact.

State Route 139 is a U.S. Forest Service (National) Scenic Byway. Concurrence will be required from Modoc National Forest that the proposed project will not adversely affect attributes of the highway which contribute to the scenic byway status.

Based on the need for culvert extensions and repairs, this mini-PEAR assumes that jurisdictional waters would be affected and regulatory permits would be required. During the planning phase of the project, field surveys will confirm whether jurisdictional waters will be affected and determine if mitigation may be required. A reasonable estimate for potential mitigation cannot be made within the limited scope of this mini-PEAR.

The ESR should include a complete project description and mapping for all project components including staging areas, disposal sites, utility relocations, construction site access and staging requirements, etc. If possible, the ESR should be submitted to the Environmental Office prior to February to allow time for staff to prepare for and conduct spring surveys.

Special Considerations:

Biology: A cursory review of resource records and databases indicates various state and federal listed species are known to occur in the project area. Appropriate research, agency coordination, and field surveys will be required during the planning phase of the project to verify the presence or absence of special status species, nesting raptors, and jurisdictional waters, including wetlands. Floristic surveys will need to take place between April and September. This should be considered when planning the project schedule, i.e., an ESR should be provided no later than February. Mitigation may be required if jurisdictional waters or riparian vegetation is affected. Work windows and buffer zones may be required if special status species or nesting raptors are determined to be present within the project limits. Work windows and buffer zones vary by species. Some of the species that may be present in the project area include: slender Orcutt grass (federal threatened/state endangered), greater sage grouse (federal candidate/state species of concern), Swainson's hawk (state threatened), greater sandhill crane (state threatened), shortnose, Lost River, and Modoc suckers (state and federal endangered), and the following raptors which are not listed: golden eagle, northern goshawk, and osprey.

To avoid impacts to nesting birds, it would be necessary to remove trees and shrubs after August 1 and prior to March 1. If a contractor will not be on board during this period, alternate arrangements should be made to have the trees and brush dropped during the non-nesting period (e.g., by service contract or CT Maintenance).

Archaeology: Potential to encounter cultural resources in the project area is very high. Known resources exist within and adjacent to the limits of the proposed project, but information regarding previous surveys in this area is limited and dated. Consequently, cultural surveys of the entire right-of-way will be required during the planning phase of the project to look for previously unidentified resources and to

define the boundaries of previously identified resources. Given the high number of potentially eligible historic properties located within the area of direct impacts (work zone), it is estimated that Section 106 compliance would require 24 months from receipt of a complete Environmental Study Request (ESR). Since there are known resources within the proposed project limits, it may be necessary to minimize the construction footprint and possibly consider alternatives to avoid impacts at certain locations. If the impacts cannot be avoided, then it would be necessary to evaluate the resources for inclusion in the NRHP. If the project results in an adverse effect to a NRHP eligible property this time frame would become invalid. Such findings could extend the schedule for completing Section 106 studies from two years to three or four years to allow for the evaluation of significance for any identified resources as well as possible mitigation of impacts. An A&E contract would be necessary to evaluate the cultural resources and a higher level of documentation would be necessary as well. The number of resource hours that would be required for completing the Section 106 process for this undertaking may range from a low of 2,000 to a high of 4,000 depending on the number of resources affected.

For the Modoc 139 Rehab Project, the following tasks are required to comply with federal and state laws, policies, and guidelines:

- Coordinate with interested parties (e.g., CHRIS-NEIC, local historical societies, Native American Heritage Commission, local Native American representatives, Modoc National Forest);
- Delineation of an Area of Potential Effects (APE);
- Conduct an archaeological survey of the APE and preparation of an Archaeological Survey Report;
- Conduct an architectural survey of identified properties and preparation of a Historic Resource Evaluation Report;
- Preparation of a Historic Property Survey Report, a summary document;
- Coordination with the Federal Highway Administration;
- Coordination with the State Office of Historic Preservation

Hazardous Waste: An Initial Site Assessment (ISA) will be required during the planning phase of the project. The project includes earth disturbance and pavement grinding which could involve soils containing acially deposited lead (ADL) and traffic delineation paint containing high concentrations of heavy metals. The ISA will also identify any state listed hazardous waste sites, potential naturally occurring asbestos (NOA), and SSPs necessary to address potentially hazardous waste.

Floodplain: Based on the need for drainage work, a floodplain evaluation should be requested to identify any new encroachments within the base floodplain.

Landscape: The Landscape Architecture Branch should be consulted for slope stabilization and revegetation needs.

Cumulative Impacts: CEQA and NEPA require consideration of potential cumulative effects that may result from the project. Previous projects, as well as current and foreseeable future projects that could affect like environmental factors, need to be considered in conjunction with the proposed project to ascertain whether the projects, combined, will result in an adverse effect on the environment. Projects

that impact like environmental factors may result in individually minor impacts, but when considered cumulatively, the adverse affect may be considerable.

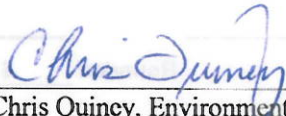
Permits:

Based on the project description, which includes repairing and/or extending existing crossdrains, the proposed project could potentially affect jurisdictional wetlands and/or streams. This mini-PEAR assumes that jurisdictional waters would be affected and the following permits would be required: 1602 Streambed Alteration Agreement from the California Department of Fish and Game, Water Quality Certification from the Regional Water Quality Control Board, and a Nationwide Permit from the U.S. Army Corp of Engineers. The timeframe for acquiring the needed permits, following PA&ED, is approximately 12 months from the date preliminary plan sheets and quantities are received. Mitigation may be required to offset any temporary or permanent loss of stream channel, wetlands, or riparian vegetation. During the planning phase of the project, field surveys will confirm whether jurisdictional waters will be affected. It will also be determined at that time whether mitigation may be warranted.

Disclaimer:

This report is not an environmental document. Due to resource constraints, only minimal information was provided from specialists. The above recommendations are based on the project description provided in this report. The discussion and conclusions provided by this mini-PEAR are approximate and are based on an in-house review of records to estimate the potential for probable effects. The purpose of this report is to provide a preliminary level of environmental analysis to supplement the PSR/PR. Changes in project scope, alternatives, or environmental law will require a reevaluation of this report.

Prepared by:



Chris Quincy, Environmental Coordinator

Date

7/1/11

Reviewed by:



Eric Akana, Project Manager

Date

7/5/11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET

REVISED

Date: July 15, 2011

02-Mod-139-PM 10.7/28.0

E.A. 4E440

Perez - Clear Recovery Zone



1. Right of Way Cost Estimate: **Alternate No. N/A**

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	\$25,000	5%	\$28,775
B. Mitigation acquisition & credits	\$0		\$0
C. Project Development Permit Fees	\$5,000	5%	\$5,755
Subtotal	\$30,000		\$34,530
D. Utility Relocation (State Share) (Owner's share: _____)	\$0		\$0
E. Relocation Assistance (RAP)	\$0		\$0
F. Clearance/Demolition	\$0		\$0
H. Title & Escrow	\$0		\$0
I. Total Estimated Right of Way Cost	\$30,000	Rounded	\$34,500
J. Construction Contract Work	\$0		

2. Current Date of Right of Way Certification

June 1, 2014

3. Parcel Data:

Type	Dual/Appr	Utilities	RR Involvements
X 0		U4 - 1 0	None X
A 0		- 2 0	C&M Agrmt
B 0		- 3 0	Svc Contract
C 0	0	- 4 0	Easements
D 0	0	U5 - 7 5	Rights of Entry
		- 8 0	Clauses
		- 9 0	
Total 0			
Areas:			Misc. R/W Work
R/W: N/A			RAP Displ N/A
Excess: N/A	No. Excess Pcls: 0		Clear/Demo N/A
Mitigation: N/A			Const Permits 2
			Condemnation N/A
			USA Involvement Yes

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET

4. Are there any major items of construction contract work?

Yes _____ No X

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

Project is within existing right of way; however, coordination with Modoc National Forest will be required for the trees that need to be removed (est. 100) that are located within the Clear Recovery Zone.

6. Are any properties acquired for this project expected to be rented, leased, or sold?

Yes _____ No X

7. Is there an effect on assessed valuation?

No X

Yes _____

Not Significant _____

8. Are utility facilities or rights of way affected?

Yes X

No _____

Utility relocations are not anticipated; however, utility verifications will be required.

9. Are railroad facilities or rights of way affected?

Yes _____

No X

10. Were any previously unidentified sites with hazardous waste and/or material found?

Yes _____

None Evident X

11. Are RAP displacements required?

Yes _____

No X

No. of single family _____

No. of business/nonprofit _____

No. of multi-family _____

No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated N/A
it is anticipated that sufficient replacement housing (will/will not) be available without
Last Resort Housing.

12. Are there material borrow and/or disposal sites required?

Yes _____ No X

13. Are there potential relinquishments and/or abandonments?

Yes _____ No X

14. Are there any existing and/or potential airspace sites?

Yes _____ No X

15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated.)

Right of Way Lead Time will require a minimum of 3 months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of 3 months will be required after receiving the last appraisal map to Right of way for certification.

Attachment D

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET

16. Is it anticipated that Caltrans will perform all Right of Way work?

Yes ☒ No ☐

Evaluation Prepared By:

Right of Way:

Tauni Melvin
Tauni Melvin

Date

7/14/11

Reviewed By:

RW Project Coordinator:

Cindy Vincelli
Cindy Vincelli

Date

7-14-11

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

Lisa Harvey
LISA HARVEY,
Senior Right of Way Agent
Project Delivery Branch
Redding

7-15-2011
Date

Attachment D

PRELIMINARY ESTIMATE OF COST (Alternative A)

EXPENDITURE AUTHORIZATION: 02-4E440K				DISTRICT, COUNTY, ROUTE, PM: 02-MOD-139-10.7/28.0		
DESCRIPTION: PAVEMENT FOCUS						
					WORKING DAYS	65
ITEM CODE		ITEM DESCRIPTION	UNIT		UNIT PRICE	AMOUNT
153103		Cold Plane Asphalt Concrete Pavement	SQYD	4,718	\$8.00	\$37,740.00
390095		Replace Asphalt Concrete Surfacing	CY	0	\$300.00	\$0.00
397005		Tack Coat	TON	43	\$600.00	\$25,800.00
397100		In-Place Recycling	SQYD	335,919	\$3.50	\$1,175,720.00
397205		Stabilizing Agent (Cementitious Material)	TON	3,386	\$150.00	\$507,910.00
						\$1,747,170.00
190110		Lead Compliance Plan	LS	1	\$3,000.00	\$3,000.00
394060		Data Cores	LS	1	\$5,000.00	\$5,000.00
						\$8,000.00
074016		Construction Site Management	LS	1	\$5,000.00	\$5,000.00
074017		Prepare Water Pollution Control Program	LS	1	\$2,000.00	\$2,000.00
						\$7,000.00
390102		Hot Mix Asphalt	TON	50,875	\$100.00	\$5,087,540.00
						\$5,087,540.00
198007		Imported Material (Shoulder Backing)	TON	11,182	\$30.00	\$335,470.00
						\$335,470.00
150713		Remove Pavement Marking	SQ FT	657	\$5.00	\$3,290.00
150742		Remove Roadside Sign	EA	87	\$200.00	\$17,400.00
151224		Remove Delineator	EA	318	\$10.00	\$3,180.00
566012		Roadside Sign Installation	LS	1	\$60,000.00	\$60,000.00
820110		Milepost Marker	EA	37	\$100.00	\$3,700.00
820108		Delineator (Class 2)	EA	342	\$100.00	\$34,200.00
820112		Marker (Culvert)	EA	190	\$100.00	\$19,000.00
860811		Replace Traffic Loop Detectors	LS	1	\$10,000.00	\$10,000.00
		CCTV	LS	1	\$130,000.00	\$130,000.00
		RWIS	LS	1	\$100,000.00	\$100,000.00
		Power Phone Development	LS	1	\$100,000.00	\$100,000.00
		crash cushion	LS	1	\$10,000.00	\$10,000.00
		Cured-In-Place Pipeliner (CIPP)	LS	1	\$149,000.00	\$149,000.00
705011		18" FES	EA	2	\$350.00	\$700.00
705019		30" FES	EA	2	\$500.00	\$1,000.00
		Culvert Extension	LS	1	\$10,000.00	\$10,000.00
						\$651,470.00
TRAFFIC CONTROL						
120090 (S)		Construction Area Signs	LS	1	\$8,000.00	\$8,000.00
120100 (S)		Traffic Control System	LS	1	\$111,600.00	\$111,600.00
128650 (S)		Portable Changeable Message Sign	LS	4	\$2,500.00	\$10,000.00
						\$129,600.00
PAVEMENT DELINEATION						
840515 (S)		Thermoplastic Pavement Marking	SQ FT	679	\$7.00	\$4,750.00
840560 (S)		Thermoplastic Traffic Stripe (Sprayable)	FT	287,390	\$0.20	\$57,480.00
850122 (S)		Pavement Marker (Retroreflective Recessed)	EA	4,831	\$10.00	\$48,310.00
						\$110,540.00
999990		Mobilization 10%	LS	1	\$807,679.00	\$807,679.00
					Subtotal	\$8,892,000.00
SUPPLEMENTAL						
066070		Maintain Traffic	LS	1	\$55,800.00	\$55,800.00
066595		Additional Water Pollution Control	LS	1	\$8,000.00	\$8,000.00
066845		Incentive For HMA (QC/QA)	LS	1	\$203,500.00	\$203,500.00
066666		Comp. Adj. for Price Index Fluc. Of Pav. Asphalt	LS	1	\$200,700.00	\$200,700.00
						\$468,000.00
State Furnished						
066063		Traffic Management Plan Public Information	LS	1	\$2,000.00	\$2,000.00
066105		Resident Engineers Office	LS	1	\$10,000.00	\$10,000.00
						\$12,000.00
Subtotal						\$9,364,000.00
15% Cont.						\$1,333,000.00
Total						\$10,697,000.00

PRELIMINARY ESTIMATE OF COST (Alternative B)

EXPENDITURE AUTHORIZATION: 02-4E440K				DISTRICT, COUNTY, ROUTE, PM: 02-MOD-139-10.7/28.0		
DESCRIPTION: PAVEMENT FOCUS						
					WORKING DAYS	65
ITEM CODE		ITEM DESCRIPTION	UNIT		UNIT PRICE	AMOUNT
153103		Cold Plane Asphalt Concrete Pavement	SQYD	4,718	\$8.00	\$37,740.00
390095		Replace Asphalt Concrete Surfacing	CY	0	\$300.00	\$0.00
397005		Tack Coat	TON	43	\$600.00	\$25,800.00
397100		Cold Foam In-Place Recycling	SQYD	335,919	\$3.50	\$1,175,720.00
397200		Stabilizing Agent (Foamed Asphalt)	TON	5,079	\$550.00	\$2,793,510.00
397205		Stabilizing Agent (Cementitious Material)	TON	3,386	\$150.00	\$507,910.00
						\$4,540,680.00
190110		Lead Compliance Plan	LS	1	\$3,000.00	\$3,000.00
394060		Data Cores	LS	1	\$5,000.00	\$5,000.00
						\$8,000.00
074016		Construction Site Management	LS	1	\$5,000.00	\$5,000.00
074017		Prepare Water Pollution Control Program	LS	1	\$2,000.00	\$2,000.00
						\$7,000.00
390102		Hot Mix Asphalt	TON	42,541	\$100.00	\$4,254,140.00
						\$4,254,140.00
198007		Imported Material (Shoulder Backing)	TON	11,182	\$30.00	\$335,470.00
						\$335,470.00
150713		Remove Pavement Marking	SQ FT	657	\$5.00	\$3,290.00
150742		Remove Roadside Sign	EA	87	\$200.00	\$17,400.00
151224		Remove Delineator	EA	318	\$10.00	\$3,180.00
566012		Roadside Sign Installation	LS	1	\$60,000.00	\$60,000.00
820110		Milepost Marker	EA	37	\$100.00	\$3,700.00
820108		Delineator (Class 2)	EA	342	\$100.00	\$34,200.00
820112		Marker (Culvert)	EA	190	\$100.00	\$19,000.00
860811		Replace Traffic Loop Detectors	LS	1	\$10,000.00	\$10,000.00
		CCTV	LS	1	\$130,000.00	\$130,000.00
		RWIS	LS	1	\$100,000.00	\$100,000.00
		Power Phone Development	LS	1	\$100,000.00	\$100,000.00
		crash cushion	LS	1	\$10,000.00	\$10,000.00
		Cured-In-Place Pipeliner (CIPP)	LS	1	\$149,000.00	\$149,000.00
705011		18" FES	EA	2	\$350.00	\$700.00
705019		30" FES	EA	2	\$500.00	\$1,000.00
		Culvert Extension	LS	1	\$10,000.00	\$10,000.00
						\$651,470.00
TRAFFIC CONTROL						
120090 (S)		Construction Area Signs	LS	1	\$8,000.00	\$8,000.00
120100 (S)		Traffic Control System	LS	1	\$111,600.00	\$111,600.00
128650 (S)		Portable Changeable Message Sign	LS	4	\$2,500.00	\$10,000.00
						\$129,600.00
PAVEMENT DELINEATION						
840515 (S)		Thermoplastic Pavement Marking	SQ FT	679	\$7.00	\$4,750.00
840560 (S)		Thermoplastic Traffic Stripe (Sprayable)	FT	287,390	\$0.20	\$57,480.00
850122 (S)		Pavement Marker (Retroreflective Recessed)	EA	4,831	\$10.00	\$48,310.00
						\$110,540.00
999990		Mobilization 10%	LS	1	\$1,003,690.00	\$1,003,690.00
		Structures	LS	1		\$0.00
					Subtotal	\$11,049,000.00
SUPPLEMENTAL						
066070		Maintain Traffic	LS	1	\$55,800.00	\$55,800.00
			LS	1		\$0.00
66244		Additional Aggregate Base	LS	1		
066595		Additional Water Pollution Control	LS	1	\$8,000.00	\$8,000.00
066845		Incentive For HMA (QC/QA)	LS	1	\$170,170.00	\$170,170.00
066666		Comp. Adj. for Price Index Fluc. Of Pav. Asphalt	LS	1	\$200,700.00	\$200,700.00
066610		Partnering	LS	1	\$0.00	\$0.00
						\$434,670.00
State Furnished						
066063		Traffic Management Plan Public Information	LS	1	\$2,000.00	\$2,000.00
066105		Resident Engineers Office	LS	1	\$10,000.00	\$10,000.00
						\$12,000.00
Subtotal						\$11,487,000.00
15% Cont.						\$1,656,000.00
Total						\$13,143,000.00

PRELIMINARY ESTIMATE OF COST (Alternative C)

EXPENDITURE AUTHORIZATION: 02-4E440K			DISTRICT, COUNTY, ROUTE, PM: 02-MOD-139-10.7/28.0			
DESCRIPTION: PAVEMENT FOCUS						
					WORKING DAYS	65
ITEM CODE		ITEM DESCRIPTION	UNIT		UNIT PRICE	AMOUNT
153103		Cold Plane Asphalt Concrete Pavement	SQYD	4,718	\$8.00	\$37,740.00
390095		Replace Asphalt Concrete Surfacing	CY	0	\$300.00	\$0.00
397005		Tack Coat	TON	43	\$600.00	\$25,800.00
397100		In-Place Recycling	SQYD	335,919	\$3.50	\$1,175,720.00
						\$1,239,260.00
190110		Lead Compliance Plan	LS	1	\$3,000.00	\$3,000.00
394060		Data Cores	LS	1	\$5,000.00	\$5,000.00
						\$8,000.00
074016		Construction Site Management	LS	1	\$5,000.00	\$5,000.00
074017		Prepare Water Pollution Control Program	LS	1	\$2,000.00	\$2,000.00
						\$7,000.00
390102		Hot Mix Asphalt	TON	42,541	\$100.00	\$4,254,140.00
						\$4,254,140.00
198007		Imported Material (Shoulder Backing)	TON	11,182	\$30.00	\$335,470.00
						\$335,470.00
150713		Remove Pavement Marking	SQ FT	657	\$5.00	\$3,290.00
150742		Remove Roadside Sign	EA	87	\$200.00	\$17,400.00
151224		Remove Delineator	EA	318	\$10.00	\$3,180.00
566012		Roadside Sign Installation	LS	1	\$60,000.00	\$60,000.00
820110		Milepost Marker	EA	37	\$100.00	\$3,700.00
820108		Delineator (Class 2)	EA	342	\$100.00	\$34,200.00
820112		Marker (Culvert)	EA	190	\$100.00	\$19,000.00
860811		Replace Traffic Loop Detectors	LS	1	\$10,000.00	\$10,000.00
		CCTV	LS	1	\$130,000.00	\$130,000.00
		RWIS	LS	1	\$100,000.00	\$100,000.00
		Power Phone Development	LS	1	\$100,000.00	\$100,000.00
		crash cushion	LS	1	\$10,000.00	\$10,000.00
		Cured-In-Place Pipeliner (CIPP)	LS	1	\$149,000.00	\$149,000.00
705011		18" FES	EA	2	\$350.00	\$700.00
705019		30" FES	EA	2	\$500.00	\$1,000.00
		Culvert Extension	LS	1	\$10,000.00	\$10,000.00
						\$651,470.00
TRAFFIC CONTROL						
120090 (S)		Construction Area Signs	LS	1	\$8,000.00	\$8,000.00
120100 (S)		Traffic Control System	LS	1	\$111,600.00	\$111,600.00
128650 (S)		Portable Changeable Message Sign	LS	4	\$2,500.00	\$10,000.00
						\$129,600.00
PAVEMENT DELINEATION						
840515 (S)		Thermoplastic Pavement Marking	SQ FT	679	\$7.00	\$4,750.00
840560 (S)		Thermoplastic Traffic Stripe (Sprayable)	FT	287,390	\$0.20	\$57,480.00
850122 (S)		Pavement Marker (Retroreflective Recessed)	EA	4,831	\$10.00	\$48,310.00
						\$110,540.00
999990		Mobilization 10%	LS	1	\$673,548.00	\$673,548.00
		Structures	LS	1		\$0.00
					Subtotal	\$7,417,000.00
SUPPLEMENTAL						
066070		Maintain Traffic	LS	1	\$55,800.00	\$55,800.00
			LS	1		\$0.00
66244		Additional Aggregate Base	LS	1		
066595		Additional Water Pollution Control	LS	1	\$8,000.00	\$8,000.00
066845		Incentive For HMA (QC/QA)	LS	1	\$170,170.00	\$170,170.00
066666		Comp. Adj. for Price Index Fluc. Of Pav. Asphalt	LS	1	\$200,700.00	\$200,700.00
066610		Partnering	LS	1	\$0.00	\$0.00
						\$434,670.00
State Furnished						
066063		Traffic Management Plan Public Information	LS	1	\$2,000.00	\$2,000.00
066105		Resident Engineers Office	LS	1	\$10,000.00	\$10,000.00
						\$12,000.00
Subtotal						\$7,856,000.00
15% Cont.						\$1,111,000.00
Total						\$8,967,000.00

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

To: Oscar Cervantes, PE
Advance Planning, MS-4
District 2

Date: July 12, 2011

File: MODOC 139-PM 10.7/28.0

EFIS: 02-0002-0285

EA: 02-4E440

From: Department of Transportation
District 2 - Office of Traffic Management

Work: MOD-139 Roadway Rehabilitation 3R Design Standards.

1. POLICY

The Caltrans Deputy Directive titled "Transportation Management Plans" (DD-60) establishes the current policy for mitigating traffic impacts resulting from construction, maintenance, encroachment permit, planned emergency restoration, locally or specially funded, or other activities. The directive states that Transportation Management Plans (TMPs) and contingency plans shall be completed for all work activities on the State highway system. The purpose of this Transportation Management Plan Data Sheet is to ensure all anticipated TMP costs are included in the Project Initiation Document (PID).

2. SCOPE OF WORK

This proposed project improves roadway conditions through the Roadway Rehabilitation 3R Design Standards: In general work may include the following:

- Full depth reclamation
- Widen and shoulder back shoulders
- Perez Overhead (OH) may need to widen the shoulders
- Upgrade bridge rails
- Upgrade signage
- Ag. Station-HMA overlay
- Upgrade crash cushions
- Address ADA at AG station
- Remove/Replace roadway delineation
- Install two (2) CCTV
- Relocate existing RWIS
- Extension and upgrade of culverts
- Upgrade MBGR

Note: This list is not complete and intended only to aid in the development of traffic mitigation measures.

Approximately 65 working days are required to complete the project, with 62 days requiring traffic control. Construction is scheduled to occur during the 2015/2016 CY.

3. FACILITY

ROADWAY: This section of SR 139 is an undivided conventional highway with two 12-ft lanes in each direction of travel and 4-ft outside paved shoulders. The alignment is tangential through flat terrain. The regulatory speed limit is 65 mph within the project limits. In addition, the Perez Agriculture Inspection Station is located within the project limits.

STRUCTURES: There are no structures located within the project limits:

OTHER FEATURES: The Perez Agricultural Inspection Station is located SB at PM 23.20.

LOCAL ROADS: The following roads are located within the project limits

PM	Local Roads	SIDE OF ROAD
13.11	McKay Flathog Rd	Left
15.37	Hackamore Rd	Right
17.16	Pac Power and Light Station	Right
17.35	Lookout Rd	Left
18.11	Dirt Rd	Right
21.73	Horse Camp Rd	Right
23.20	Perez Inspection Station	Both
24.39	So. Mears Rd	Right
24.90	Block MTN/Glass Co. Rd	Right
26.42	No. Mears Rd	Right
26.46	Lava Bed Rd.	Both
27.90	Tionesta Rd	Left

ITS FIELD ELEMENTS: The following ITS field elements have been requested for installation within the project limits.

ELEMENT	CO-RTE-PM	LOCATION	STATUS
RWIS	MOD. 139 PM 22.95	Perez Inspection Station	Planned
CCTV	MOD. 139 PM 23.95	Perez Inspection Station	Planned

CENSUS LOOPS: The following traffic monitoring station (TMS's) may be impacted during construction operations:

ID	CO-RTE-PM	TYPE	LOCATION
228	Mod 139-PM 17.08	Loops	1,415' South of County Rd 91 (Lookout Rd)
233	Mod 139 PM 17.80	Loops	2,425' North of County Rd 91 (Lookout Rd)

TRAFFIC VOLUMES:

NAME	AADT 2009	PEAK VPH		TRUCKS 2009	DATA SOURCE FOR PEAK (2008)
		WK	WE		
MOD-139 (South of Lookout Rd)	910	78	114	25%	TMS# 228 PM 17.08
MOD-139 (South of Lookout Rd)	1250	86	128	25%	TMS # 233 PM 17.80

WD = Weekday; WE = Weekend; NA=Not Available *Both directions.

4. TRAFFIC IMPACTS

TRAFFIC: When personnel are working within 6 ft of the edge ETW, a lane closure is required. All work will be carried out using Std Plan T-13 (reversing 1-way traffic control) since there is not enough consistent pavement width to maintain 2 lanes of traffic. It is anticipated that all work can be carried out during typical 10-12 hour workshifts, allowing the full width of the roadway to be provided when operations are not in progress. Based on the low traffic volumes, a two mile long lane closure could be accommodated anytime without creating significant traffic impacts.

LOCAL ROAD CONNECTIONS: Traffic on the local road connections will be subject to stop and delays while waiting for the queue to pass on the mainline. When operations are not active, traffic will move as normal.

PEDESTRIANS & BICYCLES: Pedestrians and bicyclists are allowed on SR 139; however few are expected due to the rural location. Stage construction will always provide one 2.5-ft wide paved shoulder to pedestrians and bicyclists. During Std Plan T-13 lane closures, pedestrians can use the opposing paved shoulder, or the unpaved shoulder on either side of the roadway to travel past the workzone. Bicyclists will need to use the lane open to traffic. Because of the isolated location of the project and because vehicle speeds will be reduced during traffic control, minimal impacts to bicyclists are expected.

CORRIDOR: The project is on the Canby to Oregon corridor for which the D2 DTM has established a maximum corridor delay limit of 30 minutes. Also, lane closures spaced closer than 5.0 miles are generally not allowed to allow queues to disperse between closures and to avoid traffic control conflicts between projects. Based on the current workplan status, there are no other projects on the SR 139 corridor scheduled for construction in 2015/2016.

TRUCKS: This portion of SR 139 is designated as a terminal access route to the STAA National Network. Annual permits are issued for trucks 10-foot to 12-foot in width. Occasionally under special approval, single trip permits are issued for trucks over 12-feet in width. It is not known at this time if k-rail or other hard devices will be used during construction operations on several structures. If adequate clearance is not maintained impacts to trucks will occur.

ITS FIELD ELEMENTS: A-CCTV and RWIS are planned for installation within the project limits and should be installed as part of this project. Further information regarding this equipment can be obtained from Ian Turnbull, ITS Engineering and Support at 530-225-3320.

CENSUS LOOPS: All census loops listed above will be impacted by construction operations requiring replacement. Further information regarding this equipment can be obtained from Karen Carmo, Traffic Census, at 530-225-3042

PEREZ INSPECTION STATION: Traffic through the inspection stations will be subject to stop and delays, same as the mainline. When operations are not active, traffic will move as normal.

5. TRAFFIC IMPACT MITIGATION

LANE CLOSURES: Lane closures will be allowed anytime except designated legal holidays, and any special event to be determined in the TMP. Lane closure charts are not required. The maximum stop and delay times will be specified in the TMP.

LOCAL ROAD CONNECTIONS: Because there are no detour routes available, the few road connections must remain open by using half-width operations and providing a minimum of a 10-ft lane.

TRUCKS: To accommodate truck movement, the TMP will require that the following be provided:
Mainline - Placement of any hard device such as K-Rail must provide a minimum of one 16ft traffic opening.
Local Roads – A minimum of one 12 ft lane and 4 ft shoulder during all construction stages.

PEREZ INSPECTION STATION: Staged construction operations should be provided, to accommodate the inspection station operations..

ITS FIELD ELEMENTS: If funding allows the PE should include installation costs to install the planned CCTV and RWIS locations described in Section 3. Further information can be obtained from Ian Turnbull, ITS Engineering & Support at 530-225-3320.

CENSUS EQUIPMENT: The PE shall include funds to replace the *existing* equipment described in section 3. Karen Carmo, Traffic Census, should be contacted at 530-225-3042 to obtain further information.

COORDINATE CONSTRUCTION: For conventional facilities, the D2 DTM policy is that lane closures shall be spaced no closer than 5.0 mi to avoid traffic control conflicts and to allow dispersal of queues between closures. Because the construction schedule has not yet been established, no conflicts were identified as of the date of this datasheet. * NOTE: When the TMP is written SR 139, route conflicts will be identified.

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMSs): Due to the high approach speeds and high truck volumes, portable CMSs are recommended for this project.

PROJECT-SPECIFIC MEDIA RELEASE: This project will impact a significant the communities of Alturas, Canby, Newell and Tulelake. Thus, the PE should include funds to allow the RE and D2 PIO to develop and issue advance notification of planned lane closures to the local media (news, radio, and newsprint).

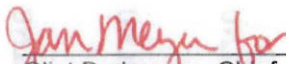
WORKER SAFETY MEDIA CAMPAIGNS: Worker safety media campaigns have been shown to reduce work zone vehicle collisions. Reducing work zone collisions will increase public and worker safety and reduce incident related congestion. With safety and reliability being the Departments number 1 and 2 goals respectively, it is appropriate for construction funding be set aside for worker safety media advertisements.

COSTS: In addition to costs associated with typical Std Plan T-13, and T-17 traffic control, the following shall be incorporated into the project estimate:


- **STAGE CONSTRUCTION:** Increased cost associated with staging work to maintain access at local road intersections and Perez Inspection Station.
- **PORTABLE CMSs:** As part of the traffic control system, include cost of PCMSs during lane closures, ramp closures.
- **ITS FIELD ELEMENTS:** Cost associated with new installation of the new CCTV and RWIS.
- **CENSUS EQUIPMENT:** Include costs for replacement of the *existing* census station loops, conduit and pull boxes.
- **TMP PUBLIC INFORMATION:** Include cost in item #066063-Transportation Management Plan Public Information for worker safety media campaigns and for preparation of project-specific information to be distributed to the public and local media prior to ramp closures.
- **CONTINGENCY COSTS:** Contingency costs for equipment breakdown, shortage of materials, etc. should be included.

TMP: The TMP for this project will summarize the traditional traffic handling practices and other traffic mitigation strategies that will be implemented during construction that will include, but is not limited to: 2 week pre-notification of closures (Lane Closure Schedule), DTM evaluation of cumulative traffic corridor delays for multiple projects, California Highway Information Network (CHIN), Road Work Information Bulletin (RIB), Local Agency contacts, Permanent Changeable Message Sign (CMS) locations, permanent and portable Highway Advisory Radio (HAR) locations, CHP Commander contacts, incident response (accident, natural event) contacts, contingency plans, and maintenance contacts. **A TMP for this project is required and should be requested when the design is complete enough to determine specific traffic impacts but early enough to make design changes/additions required for traffic mitigation.**

This TMP Data Sheet was written by Sandra Rivera ATP. I have personally reviewed this TMP Data Sheet and all supporting information. I certify that the assumptions are reasonable and proper subject to the limiting conditions set forth and I find the Data Sheet complete and current.


Clint Burkenpas, Chief
Office of Traffic Management, District 2
7-25-11
Date

ITS REVIEW: Because the project also includes ITS field elements, Ian Turnbull, Chief of the ITS Engineering & Support Office, Caltrans District 2, also reviewed this document.


Ian Turnbull, Sr TEE
Chief, Office of ITS Engineering & Support
District 2
25 JULY 2011
Date

Attachment F

Collection Date: 07/27/2008
Printed: 07/27/2011

Caltrans Maintenance Program 2008 Pavement Condition Survey Inventory Caltrans Drive Order

HA, District 2, MOD, Rte 139, PM 10.7 - 28.0

District 2
County MOD
Route 139
Begin PM 12.000

District 2 County MOD Route 139

Begin PM - End PM	Lane	Surface Type	Alligator Cracking		Length	LaneMi. (Est.)	Type	Slab Cracking		Faulting	Patching		Ride, IRI	Priority	Skid	Defect
			A %	B % C (Y/N)?				1st %	3rd %		Area %	Poor Cond.?				
12.000 - 13.000	R1	F-DG	0	72	Yes	2.000	2LNU	1	1				7	95	7	HIGH ABC
14.000 - 15.000	L1	F-DG	0	84		2.000	2LNU	1	1				7	94	7	HIGH ABC
21.000 - 22.000	R1	F-DG	6	89		2.000	2LNU	1	1				7	93	7	HIGH ABC
22.000 - 23.000	L1	F-DG	0	94	Yes	3.000	MLU	1	1		6		29	181	7	HIGH ABC
23.000 - 24.000	R1	F-DG	0	100	Yes	3.000	MLU	1	1		27		16	128	7	HIGH ABC
24.000 - 25.000	L1	F-DG	0	100	Yes	2.000	2LNU	1	1		49		21	151	7	HIGH ABC
25.000 - 26.000	L1	F-DG	0	50	Yes	2.000	2LNU	1	1		50		18	136	7	HIGH ABC
26.000 - 27.000	R1	F-DG	0	100	Yes	2.000	2LNU	1	1		41		13	118	7	HIGH ABC
27.000 - 28.000	L1	F-DG	0	74	Yes	2.000	2LNU	1	1				16	129	7	HIGH ABC
28.000 - 29.000	R1	F-DG	0	94	Yes	2.000	2LNU	1	1				14	122	7	HIGH ABC
29.000 - 30.000	L1	F-DG	0	100	Yes	2.000	2LNU	1	1				18	136	7	HIGH ABC
30.000 - 31.000	R1	F-DG	0	74	Yes	2.000	2LNU	1	1				7	96	7	HIGH ABC
31.000 - 32.000	L1	F-DG	0	21	Yes	2.000	2LNU	1	1		50		12	116	7	MOD ABC & PAT
32.000 - 33.000	R1	F-DG	9	41	Yes	2.000	2LNU	1	1				9	104	7	HIGH ABC

*Surface type of 'EB' is Enhanced Binder.
California Department of Transportation, Maintenance Program, Pavement Management Information Branch, Phone (916) 274-6057

Caltrans Maintenance Program 2008 Pavement Summary Caltrans Drive Order

HA, District 2, MOD, Rte 139, PM 10.7 - 28.0

District 2
County MOD
Route 139
Begin PM 12,000

District 2 County MOD Route 139

Priority	County	Route	Begin PM	End PM	Length	Pave Type	Dir.	Trig. Dir.	Trig. Ln	AADT (,000)	MSL	Allig. A	Patch- B	Bleed- ing	Rut- ing	1st St. Crk.	3rd St. Crk.	Com- er Fault- ing	Int'l Rough. Index	Defect
7	MOD	139	12,000	-	1,000	F	B	R	1,000	1	1	72							95	HIGH ABC
7	MOD	139	14,000	-	1,000	F	B	B	2,000	1	1	6	89						94	HIGH ABC
7	MOD	139	21,000	-	1,000	F	B	B	2,000	1	1	9	94	6					181	HIGH ABC
7	MOD	139	22,000	-	1,000	F	B	B	2,000	1	1	100	27						135	HIGH ABC
7	MOD	139	23,000	-	1,000	F	B	B	3,000	1	1	17	100	49					151	HIGH ABC
7	MOD	139	24,000	-	1,000	F	B	B	2,000	1	1	100							129	HIGH ABC
7	MOD	139	25,000	-	1,000	F	B	B	2,000	1	1	100	50						136	HIGH ABC
7	MOD	139	26,000	-	1,000	F	B	B	2,000	1	1	100							96	HIGH ABC
7	MOD	139	27,000	-	1,000	F	B	B	2,000	1	1	27	41	50					116	HIGH ABC
Total Triggered Lane Miles										18,000										

----- Maximum Observed Values -----

Note: HA Project locations highlighted in bold typeface.
California Department of Transportation, Maintenance Program, Pavement Management Information Branch, Phone (916) 274-6057

Caltrans Maintenance Program 2008 Recommended Project List Caltrans Drive Order

HA, District 2, MOD, Rte 139, PM 10.7 - 28.0

Program	Priority	County	Route	Begin PM -	End PM	Trig. Dir.	Pave Type	Length	AADT (,000)	MSL	Trig. Lnm	Proj. Lnm	Effect-iveness	Defect
HA	7	MOD	139	12,000 -	13,000	R	F	1,000	1	1	1,000	2,000	50	HIGH ABC
HA	7	MOD	139	14,000 -	15,000	B	F	1,000	1	1	2,000	2,000	100	HIGH ABC
HA	7	MOD	139	21,000 -	28,000	B	F	7,000	1	1	15,000	16,000	93	HIGH ABC
Project count for district:										Totals	18,000	20,000		
Project Count										Totals	18,000	20,000		

Attachment G

EA 02-4E440K

Perez Rehab

02-MOD-139-PM-10.7/28.0

PROJECT THREAT AND OPPORTUNITY LISTING

ID #	Identification	Qualification / Quantification			Response Strategy		Control		
		(P) Probability	(I) Impact	(E) Exposure	Strategy	Risk Response Actions including Advantages & Disadvantages of the action	Responsibility (Risk Manager)	Status Interval or Milestone Checks	Date, Status, & Review Comments
	(X) Refers to ESI Risk Management Tool Number								
	(1) & (2)	(H) High	(M) Medium	(L) Low	(4)	(5)	(6)		
		(P) % or H/M/L	(I) \$1000 or H/M/L	(E) (P) x (I) or P/I	+Accept +Minimize Probability +Minimize Impact +Defect +Avoid	Risk Response Actions including Advantages & Disadvantages of the action			
1	There may be changes in staff and or availability of staff.	M	H	MH	Minimize Impact	Keep good records for smooth hand-off to new staff, when possible provide transition time.	PM, PE, Senior staff	PDTs	
2	Construction and support costs may escalate higher than the programmed amounts.	M	H	MH	Minimize Impact	Keep costs up to date; consider scope changes to lower costs; seek to program add't dollars. Assure PID has correct contingencies.	PM, PE, programming	PDTs, SHOPP cycle	
3	Increased costs associated with storm water management issues.	M	L	ML	Minimize Impact	Keep costs up to date; consider scope changes to lower costs; seek to program add't dollars.	PM, PE, RE	PDTs	
4	Trees have to be removed in compliance with the migratory bird act. Delays in removing trees could impact schedule.	M	M	MM	Accept		PM, PE, RE		

Attachment H

PROJECT THREAT AND OPPORTUNITY LISTING									
ID #	Identification (X) Refers to ESI Risk Management Tool Number	Qualification / Quantification			Response Strategy			Control	
		(P) probability	(I) impact	(E) exposure	Strategy (4)	Risk Response Actions including Advantages & Disadvantages of the action	Responsibility (Risk Manager)	Status Interval or Milestone Checks	Date, Status, & Review Comments
		(H) high	(M) medium	(L) low					
	(1) & (2)					(5)			(6)
		(P) % or H/M/L	(I) \$1000 or H/M/L	(E) (P) x (I) or P/I	+Accept +Minimize Probability +Minimize Impact +Deflect +Avoid				
5	Environmental issues may arise related to the drainage improvements.	L	M	LM	Minimize Probability		PM, PE, RE		
6	New telephone and electrical hookups are required for CCTV - coordination may be an issue	M	M	M	Accept		PM, R/W Staff		
7	High occurrence of cultural resources within the project limits. A new site could impact the project.	M	M	MM	Minimize Impact	Consider scope changes to more easily solve environmental issues	PM, PE, Envir Staff		
8	The scope may need to be reduced due to SHOPP programming limitations.	M	M	MM	Accept	Accept scope changes; program other projects to capture the needed PM scope improvements	PM, PE		
9	Opportunity to remove ITS elements may present itself In the design phase.	M	M	MM	Probability	Once project is programmed see if a stand alone ITS project has been programmed for this section of the project.	PM, PE		
10									